Jingqi Huang

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EDUCATION

Purdue University

West Lafayette Ph.D. in Computer Science May 2020 - Present

Advisers: Muhammad Shahbaz

University of California, San Diego

M.S. in Electrical and Computer Engineering

Advisor: Xinyu Zhang

Beijing University of Posts and Telecommunications

B.E. in Electrical and Computer Engineering

Advisor: Anfu Zhou

Beijing, China

March 2020

Sep 2018

La Jolla, California

West Lafayette, IN

May 2020 - Present

Professional & Research Experience

Purdue University

Assistant in Research

- (Ongoing) Profiling and analysis the system load of 5G mobile core. **Intel Labs** Hillsboro, OR

May 2021 - Aug 2021 Research Scientist Intern

- Implemented in-network ML aggregation and Map/Reduce operations on programmable data planes.

University of California, San Diego

Sep 2018 - Mar 2020 Research Assistant

- Implemented and evaluated the millimeter-wave vehicle-to-everything (mmWave V2X) use case for 5G NR [3].

- Designed and developed X-Array [4] for prototyping and evaluating omnidirectional millimeter-wave (mmWave) network.

Beijing University of Posts and Telecommunications

Beijing, China

La Jolla, CA

Aug 2014 - Jun 2018 Assistant in Research

- Designed and developed KPad [6], a system to increase channel utilization in Wi-Fi MU-MIMO.

- Developed Romil [1, 5] for robust indoor mmWave communication.

Publications

Journal Articles

1. Anfu Zhou, Shaoqing Xu, Song Wang, Jingqi Huang, Shaoyuan Yang, Teng Wei, Xinyu Zhang, and Huadong Ma. Robotic Millimeter-Wave Wireless Networks. IEEE/ACM Transactions on Networking, 28(4):1534–1549, 2020

Conference Papers

- 2. Haotian Deng, Qianru Li, Jingqi Huang, and Chunyi Peng. iCellSpeed: Increasing Cellular Data Speed with Device-Assisted Cell Selection. In ACM MobiCom, 2020
- 3. Song Wang*, Jingqi Huang*, and Xinyu Zhang. Demystifying Millimeter-Wave V2X: Towards Robust and Efficient Directional Connectivity Under High Mobility. In ACM MobiCom, 2020. (*equal contribution)
- 4. Song Wang*, Jingqi Huang*, Xinyu Zhang, Hyoil Kim, and Sujit Dey. X-array: Approximating Omnidirectional Millimeter-Wave Coverage Using an Array of Phased Arrays. In ACM MobiCom, 2020. (*equal contribution)
- 5. Anfu Zhou, Shaoqing Xu, Song Wang, Jingqi Huang, Shaoyuan Yang, Teng Wei, Xinyu Zhang, and Huadong Ma. Robot Navigation in Radio Beam Space: Leveraging Robotic Intelligence for Seamless mmWave Network Coverage. In ACM **MobiHoc**, 2019
- 6. Song Wang*, Jingqi Huang*, and Anfu Zhou. KPad: Maximizing Channel Utilization for MU-MIMO Systems Using Knapsack Padding. In **IEEE ICC**, 2018. (*equal contribution)

Systems & Programming Skills

- Languages: Python, C/C++, P4, and SQL
- Technologies Ansible, SDN/OpenFlow, ONF Aether, Docker, Kubernetes, Mininet, and Wireless Insight

Recognitions and Awards

- 2022 Meta PhD Research Fellowship Finalist
- Beijing University of Posts and Telecommunications Scholarship for Undergraduate Education (2015–2017)